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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,786	11/30/2001	John Hart Lindemann	47058/PAN/C715/CLO155	6113

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EXAMINER

MUNSON, GENE M

ART UNIT PAPER NUMBER

2811

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/17,786

Applicant(s)

J. LINDEMANN ET AL

Examiner

G. MUNSON

Group Art Unit

2811

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-34 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-3, 5-10, 13, 14, 17, 19, 21, 23, 26-34 is/are rejected.
- ☒ Claim(s) 4, 11, 12, 15, 16, 18, 20, 22, 24, 25 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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Claims 27-29 are rejected under 35 U.S.C. 112, first paragraph. The support for these claims is unclear in the specification. In response, applicants should attempt to read these claims on the appropriate figure.

Claims 8, 17 and 30-34 are rejected under 35 U.S.C. 112, second paragraph. The “dielectric” layer (claim 8) and “second” electrode (claim 17) do not have clear antecedents. In claim 30, acronyms such as “VCSEL” are ambiguous for a claim; it is suggested to use “vertical cavity surface emitting laser (VCSEL)” for clarity, if that is the scope intended. Also the “VCSEL” is of unclear scope absent claiming what the structure necessarily comprises.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 1-3, 5, 7, 10, 13, 19, 21, 23 and 26 are rejected under 35 U.S.C. 102 as unpatentable as shown by Flynn. See Figures 1, 2, 3Q with “photodetector” 20, 30 and “capacitor” 22, 35A, 42, which is coupled between the photodetector “bias terminal” and ground.

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Claims 6-10 and 14 are rejected under 35 U.S.C. 103 as unpatentable over Flynn. The claimed materials are well known for use as a dielectric in the art, as applicants would agree (37 CFR 1.56, MPEP 2144.03), which would have been obvious to use to achieve a capacitor dielectric as in Flynn. PIN photodetectors are also well known, which would have been obvious to use to achieve a photodetector as in Flynn.

The other references are cited of interest. Conrads et al also show use of a capacitor coupled between a "photodetector bias terminal" and a ground. Yano shows use of an integrated PIN photodetector.

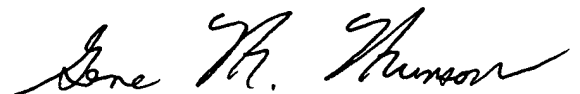
Claims 4, 11, 12, 15, 16, 18, 20, 22, 24 and 25 are objected to as dependent upon rejected claims but would be allowable over the art of record if claims 4, 11, 12, 15, 18, 20, 22 and 25 were each put in completed from including all limitations of claims 1, 2, 4; 1, 2, 11; 1, 2, 12; 1, 2, 13-15; 1, 18; 19, 20; 19, 22; 19, 24; 19, 25. The art of record does not show nor would have suggested these claims taken as a whole.

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03/10/03



**GENE M. MUNSON
EXAMINER
GROUP ART UNIT 2811**